





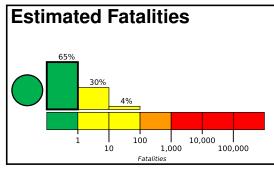
Created: 3 days, 1 hour after earthquake

**PAGER** 

Version 6

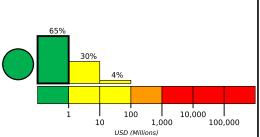
# M 6.1, 41 km NE of Barcelona, Philippines

Origin Time: 2023-12-02 17:40:16 UTC (Sun 01:40:16 local) Location: 8.3752° N 126.7462° E Depth: 50.6 km



and economic losses. There is a low likeli-





**Estimated Population Exposed to Earthquake Shaking** 

ESTIMATED POPULATION EXPOSURE (k=x1000)		_*	1,860k*	7,887k	225k	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		ı	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

## **Population Exposure**

population per 1 sq. km from Landscan

### Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unknown/miscellaneous types and heavy wood frame construction.

# **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking	
(UTC)	(km)		MMI(#)	Deaths	
1987-05-23	144	5.7	VII(70k)	1	
1990-02-08	279	6.7	VIII(96k)	1	
2002-03-05	383	7.5	VIII(12k)	15	

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

# Selected City Exposure

from GeoNames.org MMI City Population Hinatuan 10k Tidman 3k Barcelona 4k Bigaan 3k **Bislig** 68k 3k Loyola ΙV **Butuan** 310k IV 250k Libertad IV Maguapo 233k I۷ Davao 1.213k Ш **Digos** 116k

bold cities appear on map.

(k = x1000)

/// <b>–</b> //			population p	Ci i 3q. Kili ilolli	Landscan
5	50 100	500	1000	5000	10000
<b>,</b> 225.8°E	Â	127.0°E			
Surigao	Captilan				
Butuan	N				
В		*			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	Monkayo				
Davao	1	nay		/ Cree	
	5 L25.8 ° E Surigao Cabadbarar Butuan Bayu E	Surigao Cantilan Cabadbaran Butuan Bayugan Bah-Bah Bislig Monkayo Tagum Mati	5 50 100 500 125.8°E 127.0°E  Cantilan  Cabadbaran  Butuan  Bah:Bah  Bislig  Monkayo  Tagum  Mari	5 50 100 500 1000  127.0 ° E  Surigao  Cantilan  Cabadbaran  Butuan  Bayugan  Bah-Bah  Bislig  Monkayo  Tagum  Mati	Surigao  Cantilan  Cabadbaran  Butuan  Bayugan  Bah-Bah  Bislig  Monkayo  Mati

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.